

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



10/506617



(43) International Publication Date
18 September 2003 (18.09.2003)

PCT

(10) International Publication Number
WO 2003/077154 A3

(51) International Patent Classification⁷: G06F 17/27

(21) International Application Number:
PCT/EP2003/001554

(22) International Filing Date: 17 February 2003 (17.02.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
02425149.8 14 March 2002 (14.03.2002) EP

(71) Applicant (for all designated States except US): UNIVER-
SITA'DEGLI STUDI DI FIRENZE [IT/IT]; Via Di S.
Marta 3, I-50139 Firenze (IT).

(72) Inventor; and

(75) Inventor/Applicant (for US only): CASCINI, Gaetano
[IT/IT]; Dipartimento di Meccanica e Tecnologie Industri-
ali, Universita'Degli Studi di Firenze, Via Di S. Marta 3,
I-50139 Firenze (IT).

(74) Agent: GARAVELLI, Paolo; A.Bre.Mar. S.r.l., Via Ser-
vais, 27, I-10146 Torino (IT).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG,
SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI,
SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

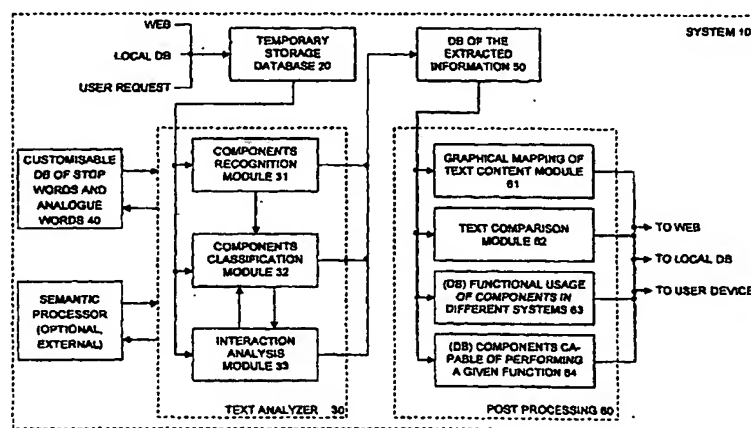
Published:

— with international search report

(88) Date of publication of the international search report:
8 April 2004

[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR PERFORMING FUNCTIONAL ANALYSES MAKING USE OF A PLURALITY OF
INPUTS



(57) Abstract: A computer based software system and method for performing automatic analyses and comparisons of patents and technical descriptions of engineering systems (as technical reports, usage and maintenance handbooks, overhaul manuals etc.) capable of translating the text of the invention into a block diagram whose graphical representation is made according to the main market standards, i.e. functional models, IDEF models etc., recognizing the components of the system (even if referenced with several nomenclatures), identifying their abstraction level hierarchy up to the lowest detail level as well as their functional and control interactions. Further features are the definition of a database of functional uses of a given component among the analyzed patents and/or a database of the subsystems capable of performing a given task. Such databases of components usages and functions fulfillments allow the fast retrieval of technical solutions and can be easily integrated with CAD systems and conceptual design software tools.

WO 2003/077154 A3